

ELECTRONIC TUBE REFERENCE

25AV5GA

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power tube designed for horizontal-deflection amplifier service in television receivers, electrically related to the 6AV5GA apart from heater characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CK	BASE PINS	8
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6CK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	A	G1 – Control Grid	CONNECTED • verified
PIN2 – Pin 2	–	H – Heater	CONNECTED • verified
PIN3 – Pin 3	A	BP – Beam-Forming Plate	CONNECTED • verified
PIN3 – Pin 3	A	K – Cathode	CONNECTED • verified
PIN5 – Pin 5	A	P – Plate (Anode)	CONNECTED • verified
PIN7 – Pin 7	–	H – Heater	CONNECTED • verified
PIN8 – Pin 8	A	G2 – Screen Grid	CONNECTED • verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	24500 Ω
TRANSCONDUCTANCE	0.0058 S
AMPLIFICATION FACTOR	4.5
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM SCREEN VOLTAGE	175 V
MAXIMUM PLATE DISSIPATION	11 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	110 mA
Reference/equivalence-only sparse-source exception: electrical tables and even the specific heater values are not reproduced.	

Beam power tube for horizontal-deflection amplifier service in television receivers.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumPeakPositivePulsePlateVoltage	5500 V	HorizontalDeflection
MaximumPeakNegativePulsePlateVoltage	1250 V	HorizontalDeflection
Maximum Peak Cathode Current	400 mA	—
Heater Warmup Time	11 s	—
Plate Voltage	250 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1 To Plate Capacitance	0.5 pF	—
Input Capacitance	14 pF	—
Output Capacitance	7 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TransconductancePublished	5900 uS	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 3 of 4

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC plate-supply voltage	550 V	HorizontalDeflection
Peak positive pulse plate voltage	5500 V	HorizontalDeflection
Peak negative pulse plate voltage	-1250 V	HorizontalDeflection
Maximum grid #2 voltage	175 V	HorizontalDeflection
Peak negative grid #1 voltage	-300 V	HorizontalDeflection
Average cathode current	110 mA	HorizontalDeflection
Peak cathode current	400 mA	HorizontalDeflection
Plate voltage	250 V	AverageCharacteristics
Grid #2 voltage	150 V	AverageCharacteristics
Plate current	57 mA	AverageCharacteristics
Grid #2 current	2.1 mA	AverageCharacteristics

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	24500 ohm	AverageCharacteristics
Transconductance	5700 uS	AverageCharacteristics
Triode amplification factor	4.3	TriodeConnection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1-to-plate capacitance	0.5 pF	—
Input capacitance	16 pF	—
Output capacitance	7 pF	—



SOURCE DATA APPENDIX

1971 RCA HB3 Binder 5 of 7

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1971 RCA HB3 BINDER 5 OF 7
Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	25 V	Nominal heater rating from supplied sheet
Heater current	300 mA	Nominal heater rating from supplied sheet
Transconductance	5800 uS	ExactParentElectricalData 6AV5GA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	550 V	ExactParentElectricalData 6AV5GA
Maximum screen-grid voltage	175 V	ExactParentElectricalData 6AV5GA
Maximum plate dissipation	11 W	ExactParentElectricalData 6AV5GA
Maximum screen-grid dissipation	2.5 W	ExactParentElectricalData 6AV5GA
Maximum average cathode current	110 mA	ExactParentElectricalData 6AV5GA



SOURCE DATA APPENDIX

1975 RCA RC30

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1975 RCA RC30
Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warm-up Time (Average) –	11 s	Other
Peak value max	200 V	Other;PublishedValue1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak value max	200 V	Other;PublishedValue2
Average value	100 V	Other;PublishedValue1
Average value	100 V	Other;PublishedValue2
Average value	100 V	Other;PublishedValue3
DC Plate Voltage	550 V	MaximumRating
Peak Positive-Pulse Plate Voltage* (Absolute Maximum)	5500 V	MaximumRating
Peak Negative-Pulse Plate Voltage	1250 V	MaximumRating
DC Grid-No	2 V	MaximumRating;PublishedValue1
DC Grid-No	175 V	MaximumRating;PublishedValue2
Peak Negative-Pulse Grid-No.1 Voltage	300 V	MaximumRating
Peak Cathode Current	400 mA	MaximumRating
Average Cathode Current	110 mA	MaximumRating
Grid-No	2 W	MaximumRating;PublishedValue1
Grid-No	2.5 W	MaximumRating;PublishedValue2
Plate Dissipationtt	11 W	MaximumRating
Grid-No. I-Circuit Resistance	0.47 megohm	MaximumCircuitValue
Maximum Plate Voltage	550 V	Section1;Promoted
Maximum Screen Voltage	150 V	Section1;Promoted
Maximum Plate Dissipation	11 W	Section1;Promoted
Maximum Screen Dissipation	2.5 W	Section1;Promoted
Maximum Cathode Current	110 mA	Section1;Promoted

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0 pF	Capacitance;PublishedValue1
Grid No.1 to Plate	5 pF	Capacitance;PublishedValue2
Grid No.1 to Cathode, Heater, Grid No	2 pF	Capacitance;PublishedValue1
Grid No.1 to Cathode, Heater, Grid No	14 pF	Capacitance;PublishedValue2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Cathode, Heater, Grid No	2 pF	Capacitance;PublishedValue1
Plate to Cathode, Heater, Grid No	7 pF	Capacitance;PublishedValue2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	60 V	Characteristic;PublishedValue1
Plate Voltage	250 V	Characteristic;PublishedValue2
Plate Voltage	150 V	Characteristic;PublishedValue3
Grid-No	2 V	Characteristic;PublishedValue1
Grid-No	1 V	Characteristic;PublishedValue2
Grid-No	180 V	Characteristic;PublishedValue3
Grid-No	150 V	Characteristic;PublishedValue4
Grid-No	1 V	Characteristic;PublishedValue1
Grid-No	0 V	Characteristic;PublishedValue2
Grid-No	-22.5 V	Characteristic;PublishedValue3
Grid-No	-22.5 V	Characteristic;PublishedValue4
Plate Resistance –	14500 ohm	Characteristic
Plate Current IM	57 mA	Characteristic
Grid-No.1 Voltage (Approx.) for plate current of	26 mA	Characteristic;PublishedValue1
Grid-No.1 Voltage (Approx.) for plate current of	2.1 mA	Characteristic;PublishedValue2
Published value	1 mA	Characteristic;PublishedValue1
Published value	-43 mA	Characteristic;PublishedValue2
Plate Resistance	14500 ohm	Section1;Promoted
Transconductance	5900 uS	Section1;Promoted